

Geometry

Name _____

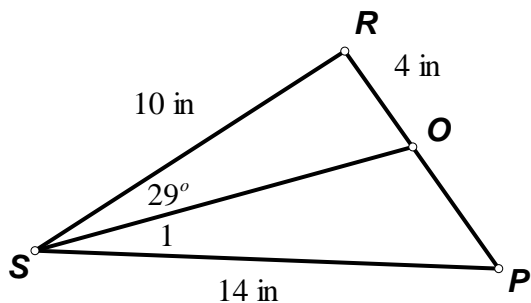
Unit 5 Worksheet 4 Angle Bisectors

Period _____ Date _____

1.) An angle bisector _____ an angle. This means that the angle bisector divides the angle into _____.

2.) The point where all the angle bisectors meet is called the _____.

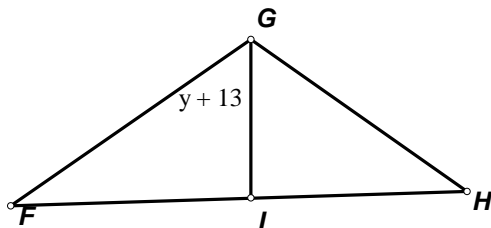
3.) \overline{SO} is an angle bisector of $\angle RSP$. Solve for $m\angle 1$ and OP .



$m\angle 1 =$ _____

$OP =$ _____

4.) If \overline{GI} is an angle bisector and $\angle FGH = 110^\circ$, find y and $m\angle FGI$.

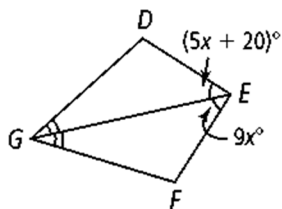


$m\angle FGI =$ _____

$y =$ _____

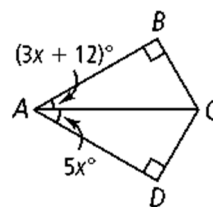
For numbers 5-8, solve for x .

5.)



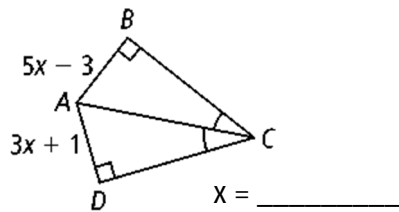
$x =$ _____

6.)

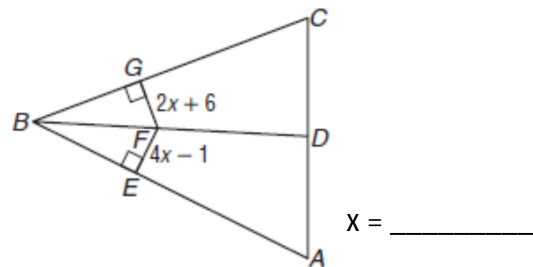


$x =$ _____

7.)



8.)

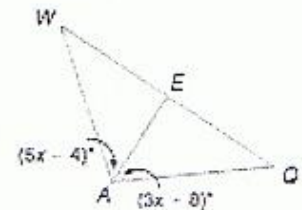


- 9.) In $\triangle LMG$, is MK an angle bisector, $m\angle 1 = 2n + 10$, $m\angle 2 = 4n - 32$ and $m\angle L = 60$. Find $m\angle G$.



10.)

If $x = 5$, is AE an angle bisector? Why or why not?



- 11.) Find x if $m\angle 2 = 1 + 28x$ and $m\angle XVW = 59x - 1$.

$(5x - 4)$

